NOTES FROM THE FIELD

Asan River

The parking area behind the church could easily be overlooked if you didn't know what it led to. The stairs built on the hillside lead you into tropical forest. Reaching the top you find the first of three 5 ½ inch guns. That's 5 ½ inches in diameter, or

the size of the shells they could fire. The barrels themselves must be 20 ft. long. These are the Piti Guns, a defensive position installed by the Japanese in 1944 on the island of Guam. The guns were discovered after fighting had stopped, for they were not ready to fire when the Americans landed to liberate Guam and the Chamorro people during World War II.

War in the Pacific National Historical Park (WAPA) on Guam is known for its historical significance, but many are not aware of its natural history. The Pacific Island Network freshwater monitoring team recently spent three weeks sampling in WAPA and in American Memorial Park on Saipan. We focused much of our efforts on examining Asan River in WAPA. This river flows from the uplands above Asan Beach, which was one of the two initial landing zones for the American invasion.

This expedition gave us the opportunity to implement the improved safety procedures mentioned in a previous newsletter. Being a somewhat modern historical battlefield, for example, it is always possible that we might run across unexploded ordinance left over from World War II. Thankfully, we didn't see any this trip. We did encounter plenty of metallic debris, mostly roofing material blown into the riverbanks during typhoons. Such hazards are the reason why all field sites must be afforded caution and respect, even if they are physically close to civilization. But it's the appeal of getting into the field that attracted our small army of volunteers, who were mostly active-duty personnel from the large U.S. military presence on Guam.

The Asan River has several distinct ecological zones. Upstream, the river flows through open canopy areas cut deeply into ravines. Sunlight reaches the water, promoting extensive algae mats. Here it is easy to find very large Tahitian prawns, with bodies up to six inches long, and claws an additional six inches in length. Downstream, the land flattens out a bit, and the stream becomes so wide, shallow, and overgrown it is essentially a wetland. Next, the stream drops through a series of cascading waterfalls into the forest. Here the canopy closes in preventing much direct sunlight from reaching the water.

Large snails, as big as the last digit of your thumb, favor this section as they can hide under cobbles in the stream. Lastly, the stream empties into the largely-developed, flat coastal area before reaching the ocean.

A recent biological survey of the shrimp community in Asan and nearby rivers revealed several species new to science.

Despite the pounding this land received 70 years ago and the intermittent typhoon devastation, diverse life continues to persist, although we will never know what might have been lost. Today, the land around Asan River is heavily developed for housing and other human uses, representing new threats to the ecosystem.

Fortunately, for the river and the animals who live in it, the NPS Inventory & Monitoring Program in Asan River is now in its fourth year. When we monitor the river every year we are better able to keep tabs on ecological changes. This yearly update informs WAPA resources managers to make the best decisions concerning the natural resources of the river and surrounding park areas.

–David Raikow, NPS
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